Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-60 (Canceled)

61. (Previously Presented) A method comprising:

during configuration of a communication channel, setting a coding rate of an encoder to an initial value;

adjusting the coding rate at the encoder by varying the coding rate from the initial value to an adjusted value; and

encoding data input into the encoder at a coding rate having the adjusted value,

wherein the method is implemented during at least one of variable data rate mode and flexible data rate mode.

62. (Previously Presented) The method of claim 61, wherein the encoder is a turbo encoder.

63. (Previously Presented) The method of claim 61, wherein said adjusting the coding rate of the encoder comprises puncturing data encoded at a first coding rate of the encoder to effectuate a second coding rate in a puncturing block of the encoder.

64. (Previously Presented) The method of claim 63, wherein:

the first coding rate is 1/5; and

the second coding rate is one of 1/2, 1/3, and 1/4.

65. (Previously Presented) The method of claim 61, wherein data input into the encoder comprises at least one of an information bit, a cyclic redundancy check bit, a tail bit, and a reserve bit.

66. (Previously Presented) The method of claim 61, wherein the coding rate of the encoder is varied according to a ratio of a size of a block interleaver and a number of bits input into the encoder over a predetermined amount of time.

67. (Previously Presented) The method of claim 66, wherein:

the coding rate is varied to 1/3 if the ratio is greater than 2 and less than or equal to 3;

the coding rate is varied to 1/4 if the ratio is greater than 3 and less than 4; and

the coding rate is varied to 1/5 if the ratio is greater than or equal to 4 and less than 5.

68. (Previously Presented) The method of claim 67, wherein the predetermined amount of time is 20 ms.

69. (Previously Presented) The method of claim 61, comprising rate matching an output of the encoder according to a size of a block interleaver.

70. (Previously Presented) The method of claim 69, wherein:

said rate matching comprises applying a puncturing algorithm to the output of the encoder for each symbol group;

each symbol group is data output from the encoder for data that is input into the encoder over a predetermined period of time;

the data output from the encoder is divided into even symbol groups and odd symbol groups; and

different puncturing patterns are applied to even symbol groups than to odd symbol groups.

71. (Previously Presented) The method of claim 69, wherein said rate matching comprises puncturing the output of the encoder according to a puncturing algorithm.

72. (Previously Presented) The method of claim 71, wherein the puncturing is applied to symbol groups of the output of the encoder having indices 2j and 2j+1 for $(j \bullet k) \bmod J < K$ where j=0 to J-1, $J = \lfloor I/2 \rfloor$ and $K = \lfloor (L - N) / 2 \rfloor$, I is a number of data bits per frame, L is a number of the encoded data bits wherein the data bits include tail bits, N is the size of block interleaver, and the encoder is a turbo encoder.

73. (Previously Presented) The method of claim 72, wherein the symbol groups of output of the encoder for the data bits except the tail bits having indices 2j and 2j+1 are applied to each different puncturing patterns.

74. (Previously Presented) The method of claim 72, wherein the symbol groups of output of the encoder for the tail bits having indices 2j and 2j+1 are applied to each same puncturing patterns.

75. (Previously Presented) The method of claim 71, wherein the puncturing algorithm is according to:

Pattern range	2I<N<=3I n=3		3I<N<4I n=4		4I<=N<5I n=5	
	P_0	P_1	P_0	P_1	P_0	P_1
Puncturing pattern	110	101	1101	1101	11101	11011
Tail puncturing pattern	101	101	1011	1011	11011	11011

76. (Previously Presented) The method of claim 71, wherein the puncturing algorithm is according

to:

Pattern range	2I<N<=3I n=3, p=2, u=2		3I<N<4I n=4, p=4, u=3			4I<=N<5I n=5, p=2, u=2	
	P_0	P_1	P_0	P_1	P_2	P_0	P_1
Puncturing pattern	110	101	1101	1101	1010	11101	11011
Tail puncturing pattern	101	101	1011	1011	1010	11011	11011

77. (Previously Presented) The method of claim 71, wherein the puncturing algorithm is according to:

Pattern range	2I<N<=3I n=3, p=2, u=2		3I<N<4I n=4, p=4, u=3			4I<=N<5I n=5, p=2, u=2	
	P_0	P_1	P_0	P_1	P_2	P_0	P_1
Puncturing pattern	110	101	1101	1111	1010	11101	11011
Tail puncturing pattern	101	101	1011	1111	1010	11011	11011

78. (Previously Presented) The method of claim 71, wherein the puncturing algorithm is according to:

Pattern range	2I<N<=3I n=3		3I<N<4I n=4			4I<=N<5I n=5	
	P_0	P_1	P_0	P_1	P_2	P_0	P_1
Data puncturing pattern	110	101	1101	1110	1011	11101	11011
Tail puncturing pattern	101	101	1011	1011	1010	11011	11011

79. (Previously Presented) The method of claim 69, wherein:

the output of the encoder comprises at least one encoded data bit and at least one

encoded tail bit;

said rate matching comprises applying a first puncturing pattern and a second puncturing pattern to said at least one encoded data bit according the coding rate; and

said rate matching comprises applying a third puncturing pattern and a fourth puncturing pattern to said at least one encoded tail bit according to the coding rate.

80. (Previously Presented) The method of claim 79, wherein:

the first puncturing pattern is applied to even groups of said at least one encoded data bit;

the second puncturing pattern is applied to odd groups of said at least one encoded data bit;

the third puncturing pattern is applied to even groups of said at least one encoded tail bit; and

the fourth puncturing pattern is applied to odd groups of said at least one encoded tail bit.

81. (Previously Presented) The method of claim 80, wherein if the coding rate is 1/3:

the first puncturing pattern is "110";

the second puncturing pattern is "101";

the third puncturing pattern is "101"; and

the fourth puncturing pattern is "101".

82. (Previously Presented) The method of claim 80, wherein if the coding rate is 1/4:

the third puncturing pattern is "1011"; and

the fourth puncturing pattern is "1011".

83. (Previously Presented) The method of claim 80, wherein if the coding rate is 1/5:

the first puncturing pattern is "11101";

the second puncturing pattern is "11011";

the third puncturing pattern is "11011"; and

the fourth puncturing pattern is "11011".

84. (Previously Presented) An apparatus configured to implement the method of claim 61.

85. (Previously Presented) The apparatus of claim 84, wherein the apparatus is a mobile station.

86. (Previously Presented) The apparatus of claim 84, wherein the apparatus is a base station.

87.-110 (Canceled)

111. (Previously Presented) A method comprising varying a coding rate for a communication channel according to a change in a rate at which data is input into an encoder after initial configuration of the communication channel.

112. (Previously Presented) The method of claim 111, wherein said varying the coding rate is implemented at the encoder.

113. (Previously Presented) The method of claim 111, wherein the encoder is a turbo encoder.

114. (Previously Presented) The method of claim 111, wherein the encoder is a convolution encoder.

115. (Previously Presented) The method of claim 111, wherein said varying the coding rate of the encoder comprises puncturing data encoded at a first coding rate of the encoder to effectuate a second coding rate in a puncturing block of the encoder.

116. (Previously Presented) The method of claim 115, wherein:

the first coding rate is 1/5; and

the second coding rate is one of 1/2, 1/3, and 1/4.

117. (Previously Presented) The method of claim 111, wherein data input into the encoder comprises at least one of an information bit, a cyclic redundancy check bit, a tail bit, and a reserve bit.

118. (Previously Presented) The method of claim 111, wherein the method is implemented in at least one of variable data rate mode or flexible data rate mode.

119. (Previously Presented) The method of claim 111, comprising rate matching an output of the encoder according to a size of a block interleaver.

120. (Previously Presented) The method of claim 119, wherein:

said rate matching comprises applying a puncturing algorithm to the output of an encoder for each symbol group;

each symbol group is data output from the encoder for data that is input into the encoder over a predetermined period of time;

the data output from the encoder is divided into even symbol groups and odd symbol groups; and

different puncturing patterns are applied to even symbol groups than to odd symbol groups.

121. (Previously Presented) The method of claim 119, wherein:

an output of the encoder comprises at least one encoded data bit and at least one encoded tail bit;

said rate matching comprises applying a first puncturing pattern and a second puncturing pattern to said at least one encoded data bit; and

said rate matching comprises applying a third puncturing pattern and a fourth puncturing pattern to said at least one encoded tail bit.

122. (Previously Presented) The method of claim 121, wherein:

the first puncturing pattern is applied to even symbol groups of said at least one encoded data bit;

the second puncturing pattern is applied to odd symbol groups of said at least one encoded data bit;

the third puncturing pattern is applied to even symbol groups of said at least one encoded tail bit; and

the fourth puncturing pattern is applied to odd symbol groups of said at least one encoded tail bit.

123. (Previously Presented) The method of claim 122, wherein if the coding rate is 1/3, then:

the first puncturing pattern is "110";

the second puncturing pattern is "101";

the third puncturing pattern is "101"; and

the fourth puncturing pattern is "101".

124. (Previously Presented) The method of claim 122, wherein if the encoding rate is 1/4, then:

the third puncturing pattern is "1011"; and

the fourth puncturing pattern is "1011".

125. (Previously Presented) The method of claim 122, wherein if the encoding rate is 1/5, then:

the first puncturing pattern is "11101";

the second puncturing pattern is "11011";

the third puncturing pattern is "11011"; and

the fourth puncturing pattern is "11011".

126. (Previously Presented) The method of claim 119, wherein said rate matching comprises puncturing the output of the encoder.

127. (Previously Presented) The method of claim 126, wherein said puncturing the output of the encoder is according to a puncturing algorithm.

128. (Previously Presented) The method of claim 127, wherein the puncturing algorithm is applied to symbol groups of the output of the encoder having indices 2j and

2j+1 for (j•k) mod J < K where j=0 to J-1, J = $\lfloor I/2 \rfloor$ and K = $\lfloor (L - N) / 2 \rfloor$, I is a number of data bits per frame, L is a number of the encoded data bits, wherein the data bits include tail bits, N is the size of a block interleaver, and the encoder is a turbo encoder.

129. (Previously Presented) The method of claim 127, wherein the puncturing algorithm is according to:

Pattern range	2I<N<=3I n=3		3I<N<4I n=4		4I<=N<5I n=5	
	P_0	P_1	P_0	P_1	P_0	P_1
Puncturing pattern	110	101	1101	1101	11101	11011
Tail puncturing pattern	101	101	1011	1011	11011	11011

130. (Previously Presented) The method of claim 111, wherein the coding rate at the encoder is varied according to a ratio of a size of a block interleaver and a number of bits input into the encoder over a predetermined amount of time.

131. (Previously Presented) The method of claim 130, wherein:

the coding rate is varied to 1/3 if the ratio is greater than 2 and less than or equal to 3;

the coding rate is varied to 1/4 if the ratio is greater than 3 and less than 4; and

the coding rate is varied to 1/5 if the ratio is greater than or equal to 4 and less than 5.

132. (Previously Presented) The method of claim 131, wherein the predetermined amount of time is 20 ms.

133. (Previously Presented) An apparatus configured to implement the method of claim 131.

134. (Previously Presented) The apparatus of claim 133, wherein the apparatus is a mobile station.

135. (Previously Presented) The apparatus of claim 133, wherein the apparatus is a base station.

136. (Canceled)

137. (New) A rate adaptation method, comprising:

providing a first prescribed number I of information bits per frame at a prescribed data rate to an encoder;

selecting a code rate 1/n of the encoder based on a ratio of N/I, where N is an interleaver size, for rate adaptation such that the code rate 1/n is selected for adapting to

changes of the prescribed data rate;

providing a second prescribed number L of symbols by the encoder, where L=n*I; and

matching the second prescribed number L of the symbols to the interleaver size N.

138. (New) The method of claim 137, wherein the code rate of 1/3 is selected when N/I is less than or equal to 3.

139. (New) The method of claim 138, wherein the code rate of 1/3 is selected when N/I > 2.

140. (New) The method of claim 137, wherein a code rate of ¼ is selected when N/I > 3.

141. (New) The method of claim 140, wherein the code rate of ¼ is selected when N/I is less than or equal to 4.

142. (New) The method of claim 137, wherein the code rate of 1/5 is selected when N/I is less than 5.

143. (New) The method of claim 137 or 142, wherein the code rate of 1/5 is selected when N/I is greater than or equal to 4.

144. (New) The method of claim 137, wherein the encoder is a turbo encoder.

145. (New) The method of claim 137, wherein the method is used for radio configuration (RC)4 of a physical channel for the forward link.

146. (New) The method of claim 137, wherein the method is implemented during variable data rate mode and/or flexible data rate mode.

147. (New) The method of claim 137, wherein the symbols are grouped into groups of L/I symbols such that the encoder output is from symbol group 0 to symbol group I-1 and even groups are punctured using a first puncturing pattern and the odd groups are punctured using a second puncturing pattern.

148. (New) The method of claim 147, wherein even groups and odd groups have indices 2j and 2j+1, respectively, where j=0 to J-1and $J=\lfloor I/2 \rfloor$ and symbol groups with indices 2j and

2j+1 are punctured by the first and second puncturing patterns, respectively, when (j*K) mod J < K, where $K=\lfloor (L-N)/2 \rfloor$.

149. (New) The method of claim 148, wherein if a code rate of 1/3 is selected, the symbol groups with indices 2j are punctured using the first puncturing pattern of '110'and the symbol groups with indices 2j+1 are punctured using the second puncturing pattern of '101', where '1' indicates no puncturing of the symbol in the symbol group and '0' indicates puncturing of the symbol in the symbol group.

150. (New) The method of claim 148 or 149, wherein the information bits include tail bits, and symbol groups with indices 2j and 2j+1 corresponding to the tail bits are punctured using a third puncturing pattern of '101', where '1' indicates no puncturing of the symbol in the symbol group and '0' indicates puncturing of the symbol in the symbol group.

151. (New) The method of claim 148, wherein if a code rate of ¼ is selected and information bits include data bits and tail bits, and symbol groups with indices 2j and 2j+1 corresponding to the tail bits are punctured using a third puncturing pattern of '1011', where '1' indicates no puncturing of the symbol in the symbol group and '0' indicates puncturing of the symbol in the symbol group.

152. (New) The method of claim 151, wherein the symbol groups corresponding to data bits with indices 2j are punctured using the first puncturing pattern of '1101'and the symbol groups corresponding to data bits with indices 2j+1 are punctured using the second puncturing pattern of '1101', where '1' indicates no puncturing of the symbol in the symbol group and '0' indicates puncturing of the symbol in the symbol group.

153. (New) The method of claim 151, wherein the symbol groups corresponding to data bits with indices 2j are punctured using the first puncturing pattern of '1011'and the symbol groups corresponding to data bits with indices 2j+1 are punctured using the second puncturing pattern of '1110', where '1' indicates no puncturing of the symbol in the symbol group and '0' indicates puncturing of the symbol in the symbol group.

154. (New) The method of claim 151, wherein if a code rate of 1/5 is selected, the symbol groups with indices 2j are punctured using the first puncturing pattern of '11101'and the symbol groups with indices 2j+1 are punctured using the second puncturing pattern of '11011', where '1' indicates no puncturing of the symbol in the symbol group and '0' indicates puncturing of the symbol in the symbol group.

155. (New) The method of claim 154, wherein the information bits include tail bits, and symbol groups with indices 2j and 2j+1 corresponding to the tail bits are punctured using a third puncturing pattern of '11011', where '1' indicates no puncturing of the symbol in the symbol group and '0' indicates puncturing of the symbol in the symbol group.